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**Sugiyama et al.**

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(54) **IMAGE DISPLAY DEVICE**

(56) **References Cited**

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See application file for complete search history.

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(57) **ABSTRACT**

An image display device includes a light source which emits light, a display element which receives the light, from the light source for generating display light, a light guiding plate which causes the display light to propagate therein, an incident element which allows the display light from the display element to be incident into the light guiding plate, and a dynamic output diffraction element provided in the light guiding plate for outputting the display light to the outside of the light guiding plate. The dynamic output diffraction element includes dynamic diffraction segment elements configured such that a diffraction function of diffracting light is invalidated or validated by voltage application. The image display device further includes a control unit which controls the dynamic output diffraction element such that one dynamic diffraction segment element whose diffraction function is validated is selected each at a time from among the dynamic diffraction segment elements.

**11 Claims, 29 Drawing Sheets**

